Remedial Investigation & Feasibility Study Update

San Jacinto River Waste Pits Superfund Site

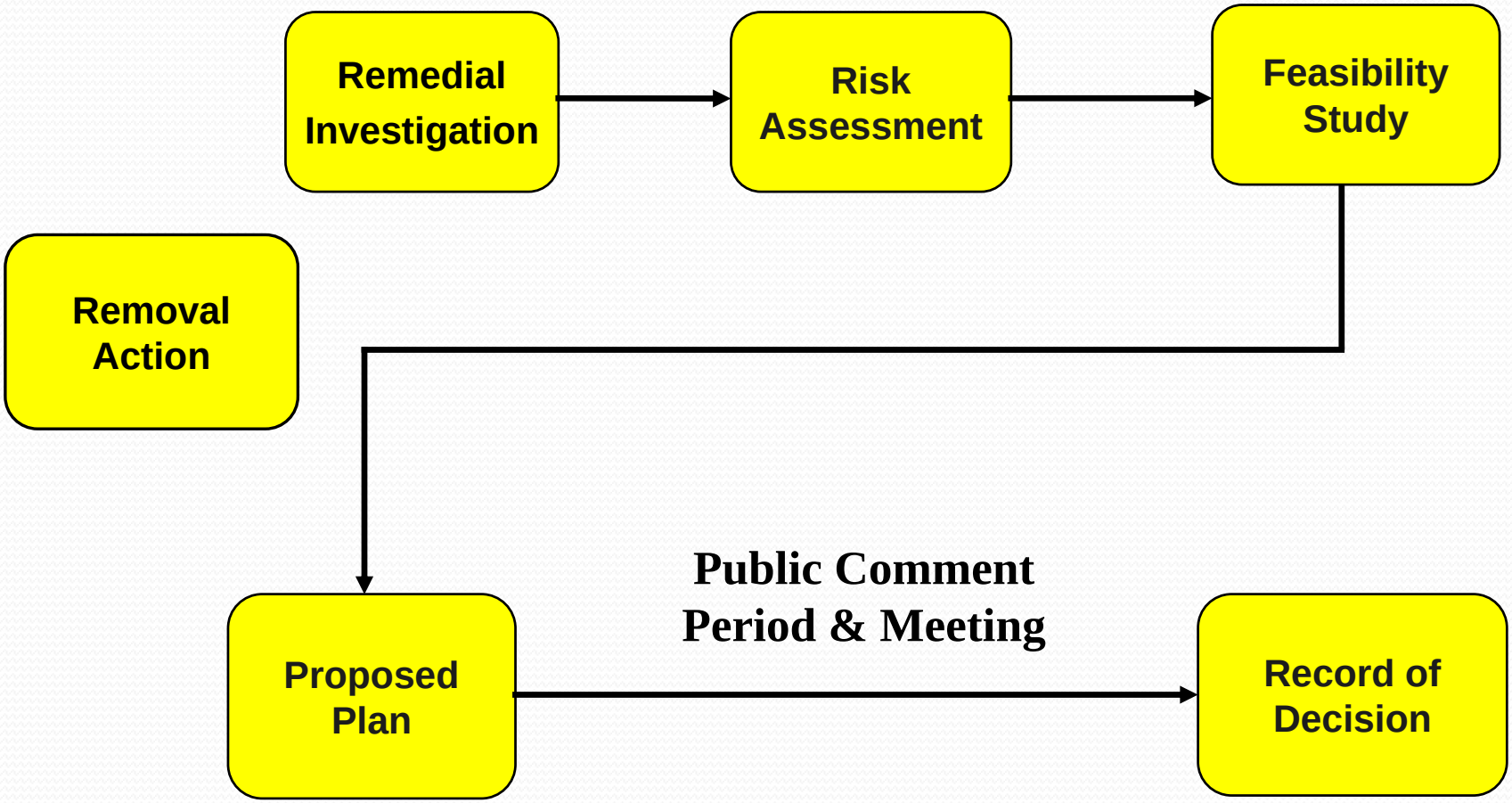
Public Meeting

September 22, 2011

90023674

United States Environmental Protection Agency

Superfund Process

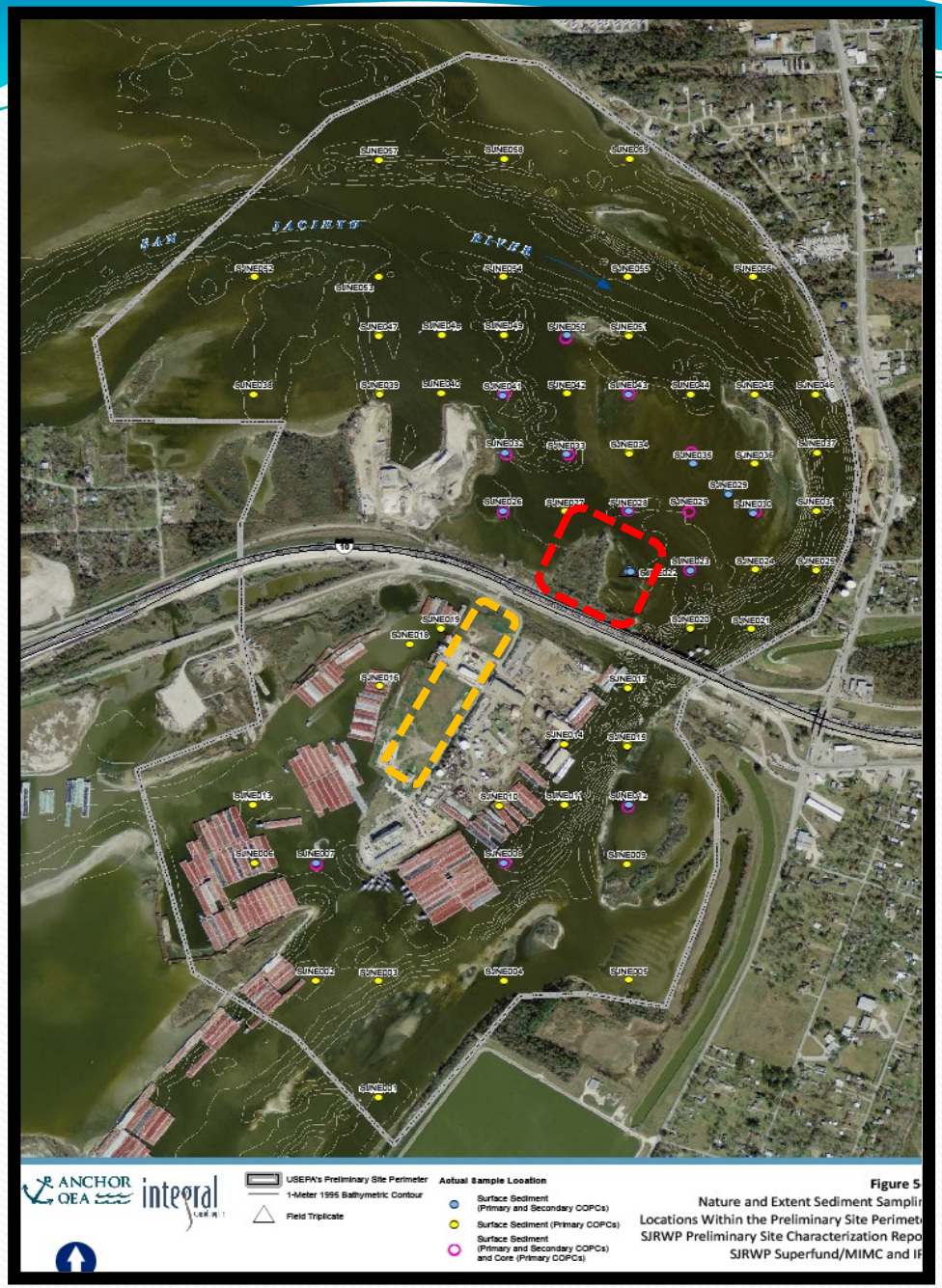


RI/FS Field Investigations

Work is being done by the site Potentially Responsible Parties under oversight of EPA, TCEQ, and other agencies.

Sample/Data Collection:

- Sediment samples on the Site & background areas.
- Soil samples collected on the Site & background areas.
- Groundwater samples (shallow & deep) below impoundments.
- Tissue samples (catfish, crab, killifish & clams) on the Site & background.
- Fate & transport studies.



San Jacinto River Waste Pits Superfund Site

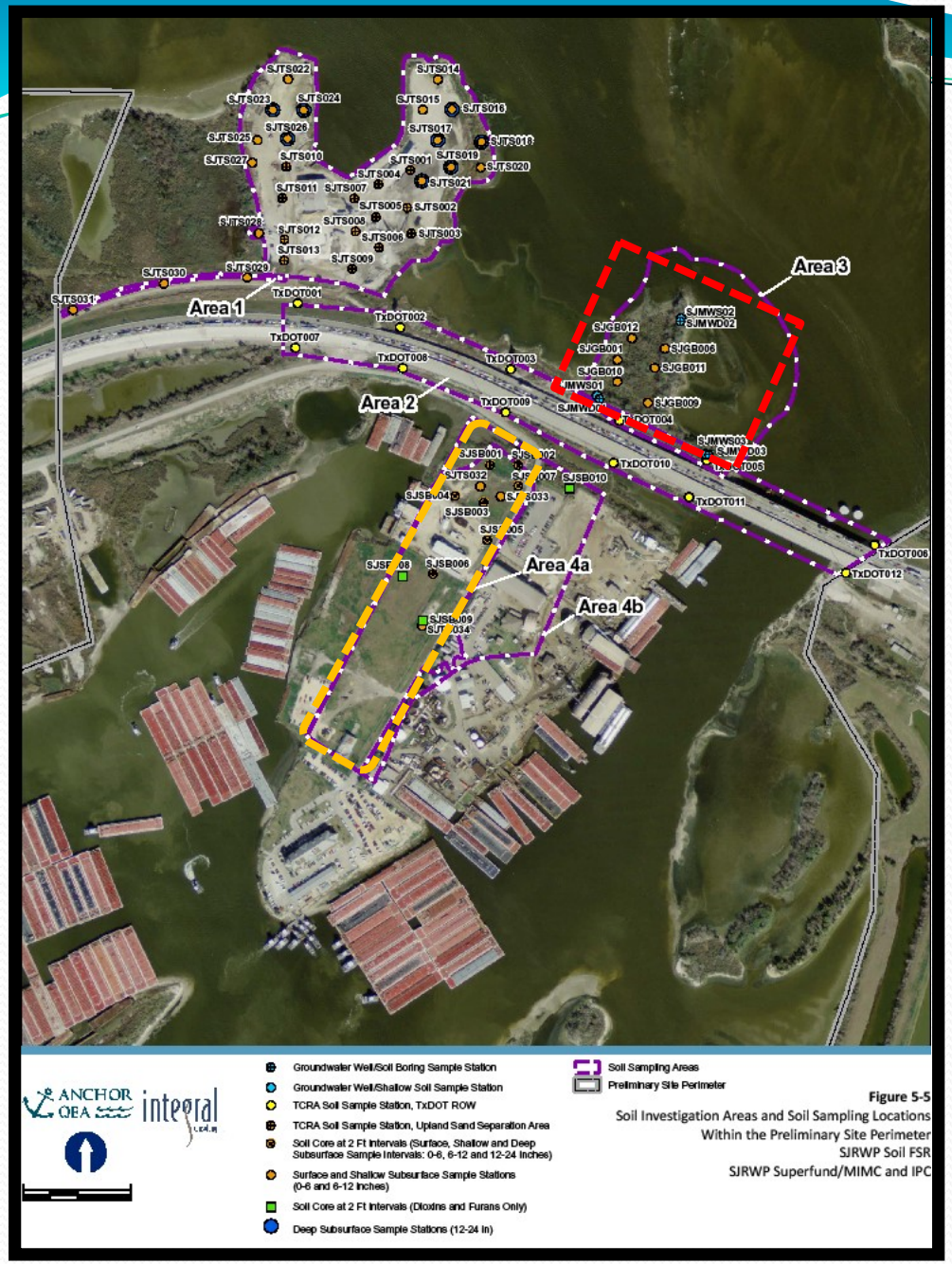
River sediment samples within preliminary site boundary.

Waste Pits

Southern Impoundment

EPA United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site



Soil samples within preliminary site boundary.

- Waste Pits
- Southern Impoundment

United States Environmental Protection Agency

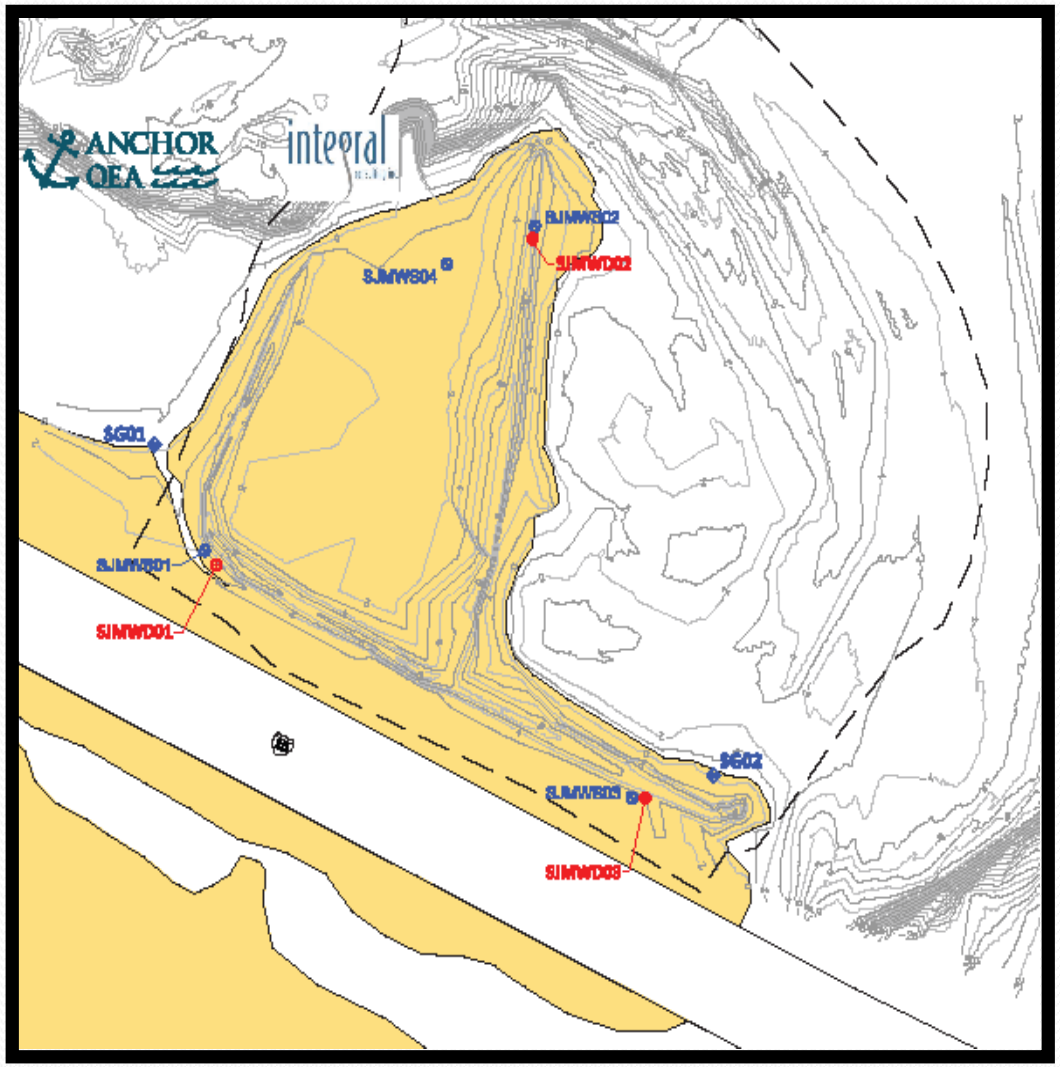
San Jacinto River Waste Pits Superfund Site

Hardhead catfish sample locations within preliminary site boundary.

United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site

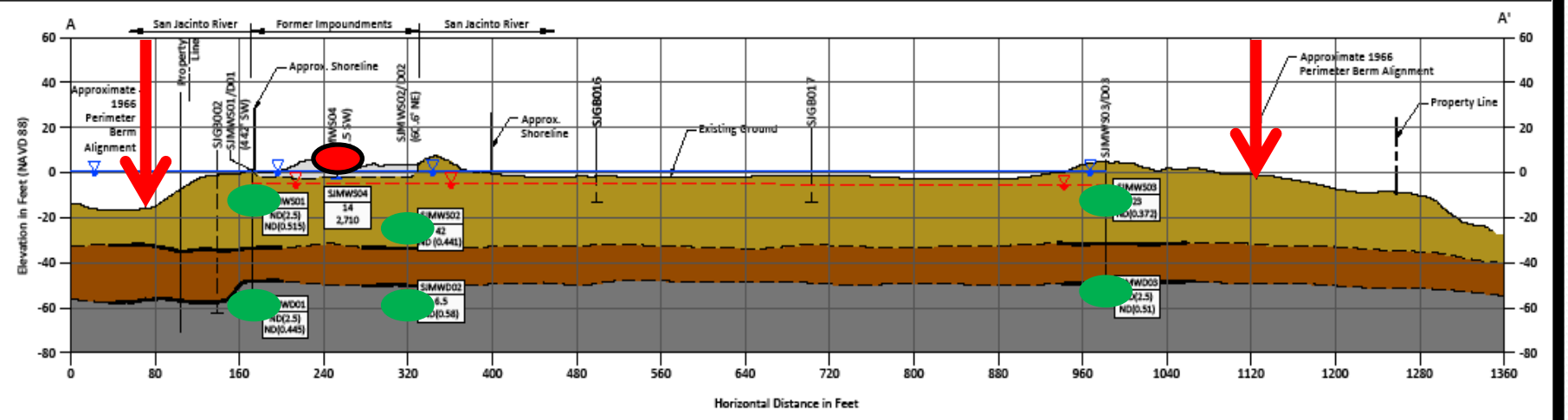
Groundwater sample locations

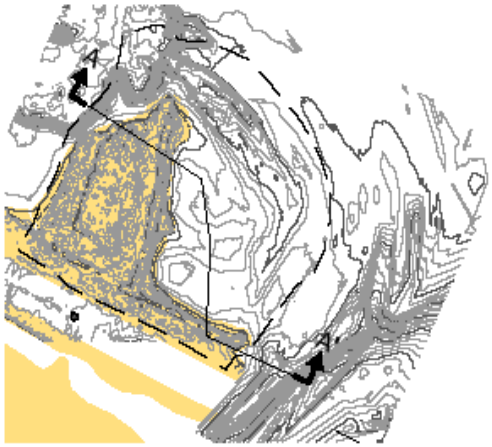


United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site

Groundwater Cross-Section





LEGEND:

- Boring location
- Stratigraphic Boundary
- Inferred Stratigraphic Boundary
- Approximate Alluvial Potentiometric Surface
- Approximate Chicot Aquifer Potentiometric Surface
- Waste (Approximate)
- Interbedded Recent Alluvial Sediments (Clay, Silt, Sand)
- Clay (Brown, Red-Brown-Gray, Blue-Gray) Upper Beaumont Formation
- SAND (Gray, Blue-Gray) Upper Beaumont Formation

Dioxin not detected in groundwater

2710 pg/L Dioxin in water within waste material.

A A'

ANCHOR QEA

integral

United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site

Future Work

Sampling/Analysis:

- Chemical fate and transport analysis.
- Additional sampling in Southern Impoundment.
- Additional background sediment and tissue sampling.

Reports:

- June 2012: Baseline Ecological Risk Assessment report to be completed.
- Oct 2012: Baseline Human Health Risk Assessment report to be completed.
- Dec 2012: Remedial Investigation report to be completed.
- Aug 2013: Feasibility Study to be completed.

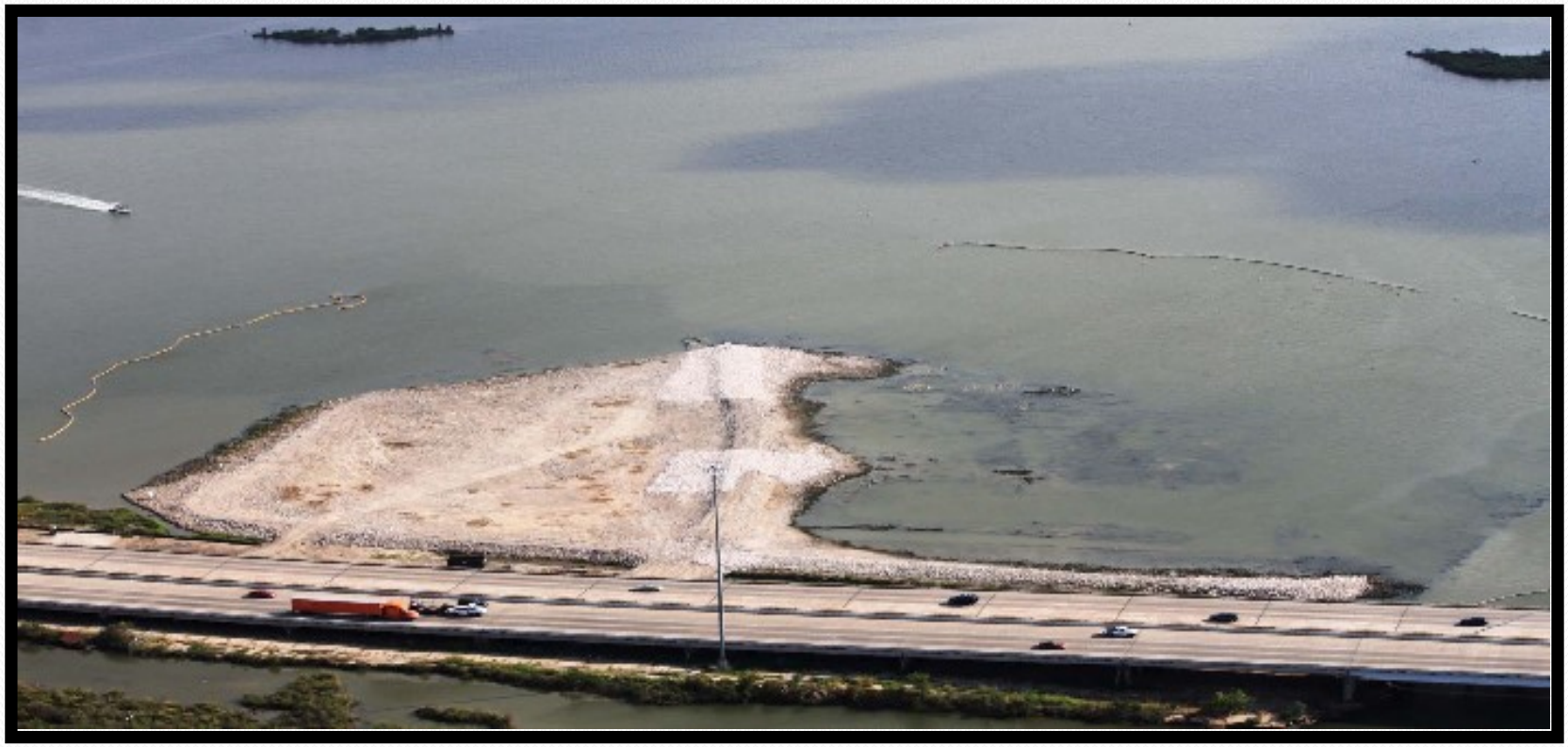
Record of Decision: In 2014, the "ROD" will select the final remedy for the waste pits & entire site following a public comment period & public meeting.

EPA United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site

Initial Assessment of Sampling Results

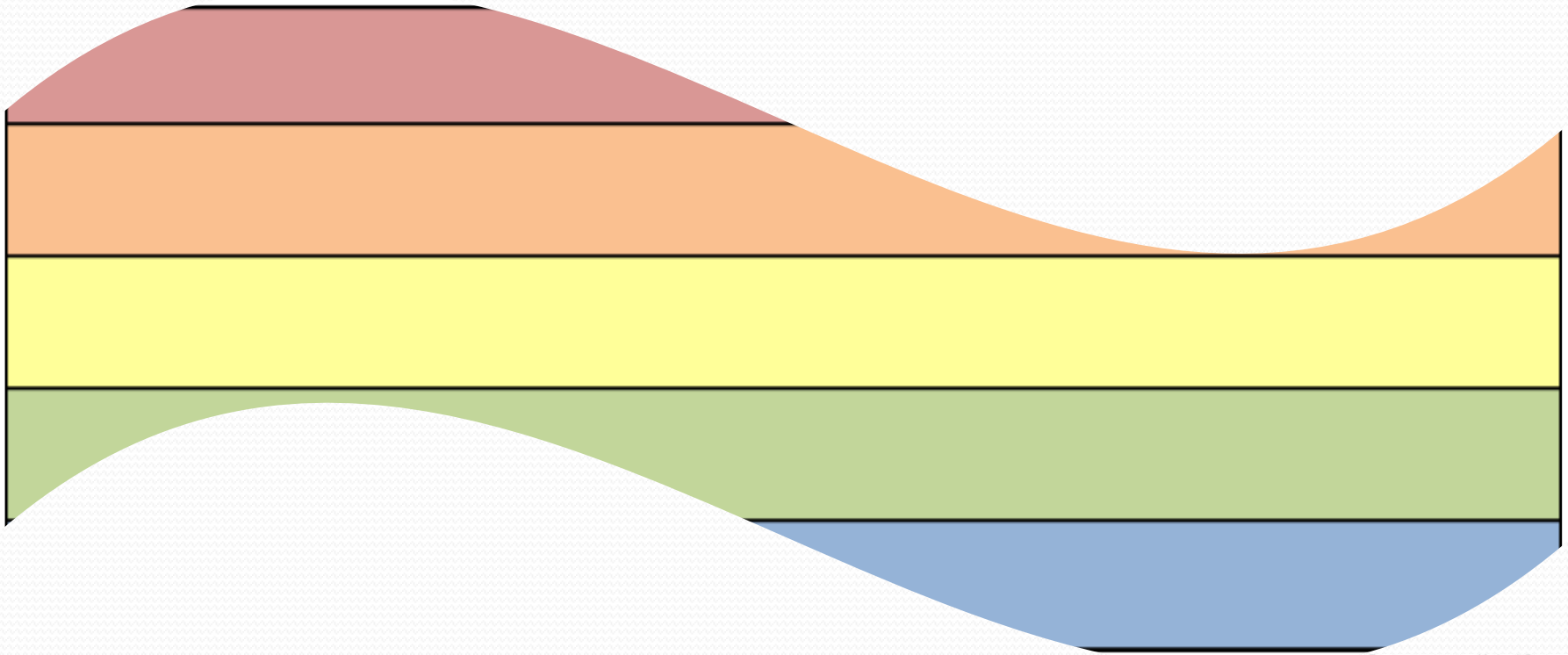
- Sediment & soil samples.
- Residential soil samples.



United States Environmental Protection Agency

San Jacinto River Waste Pits Superfund Site

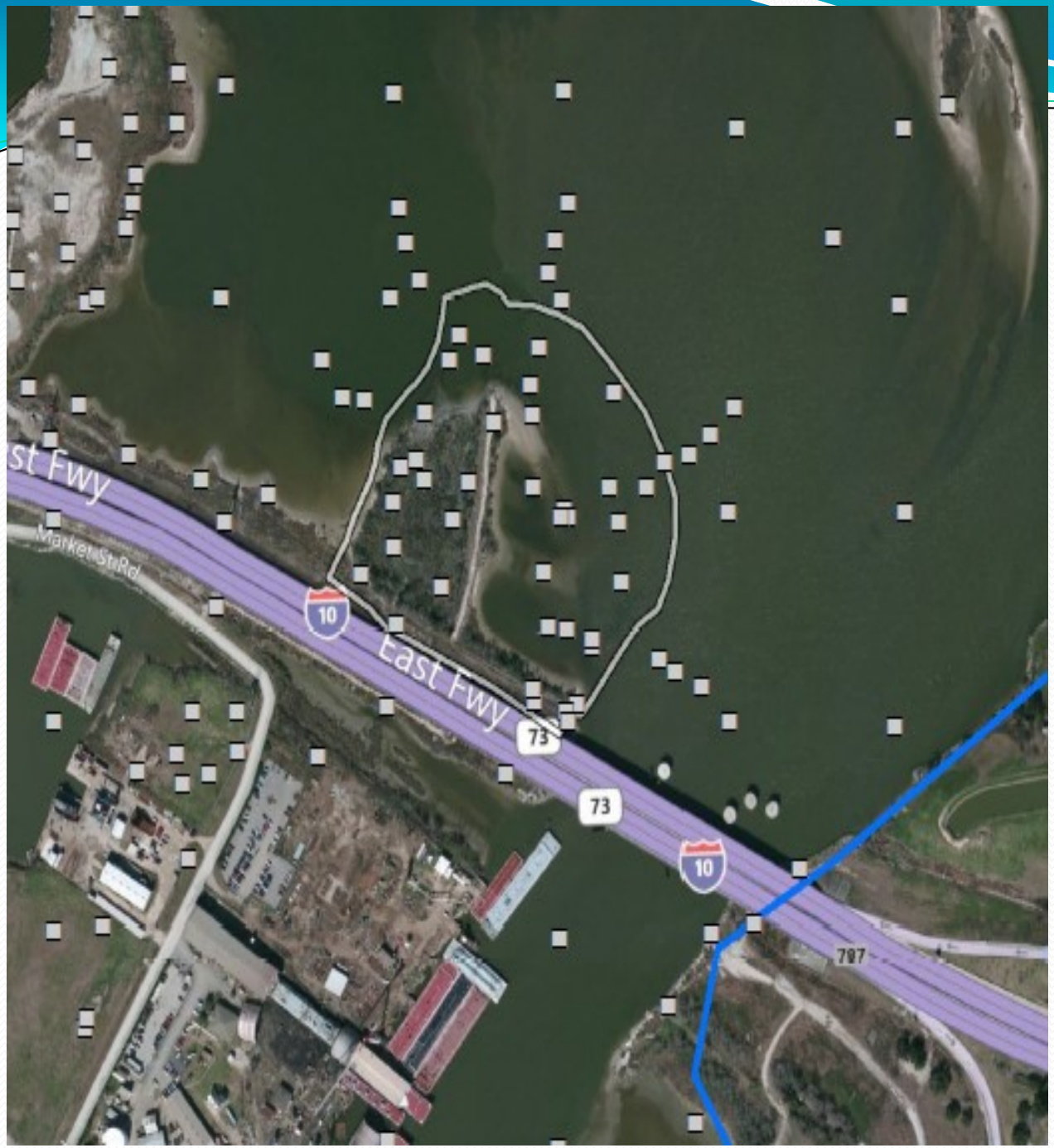
Preliminary Risk Results: Color-Coded



United States Environmental Protection Agency

Soil or Sediment Sampling Points

United States Environmental Protection Agency



Soil or Sediment Sampling Points in or surrounding the actual Northern Impoundments

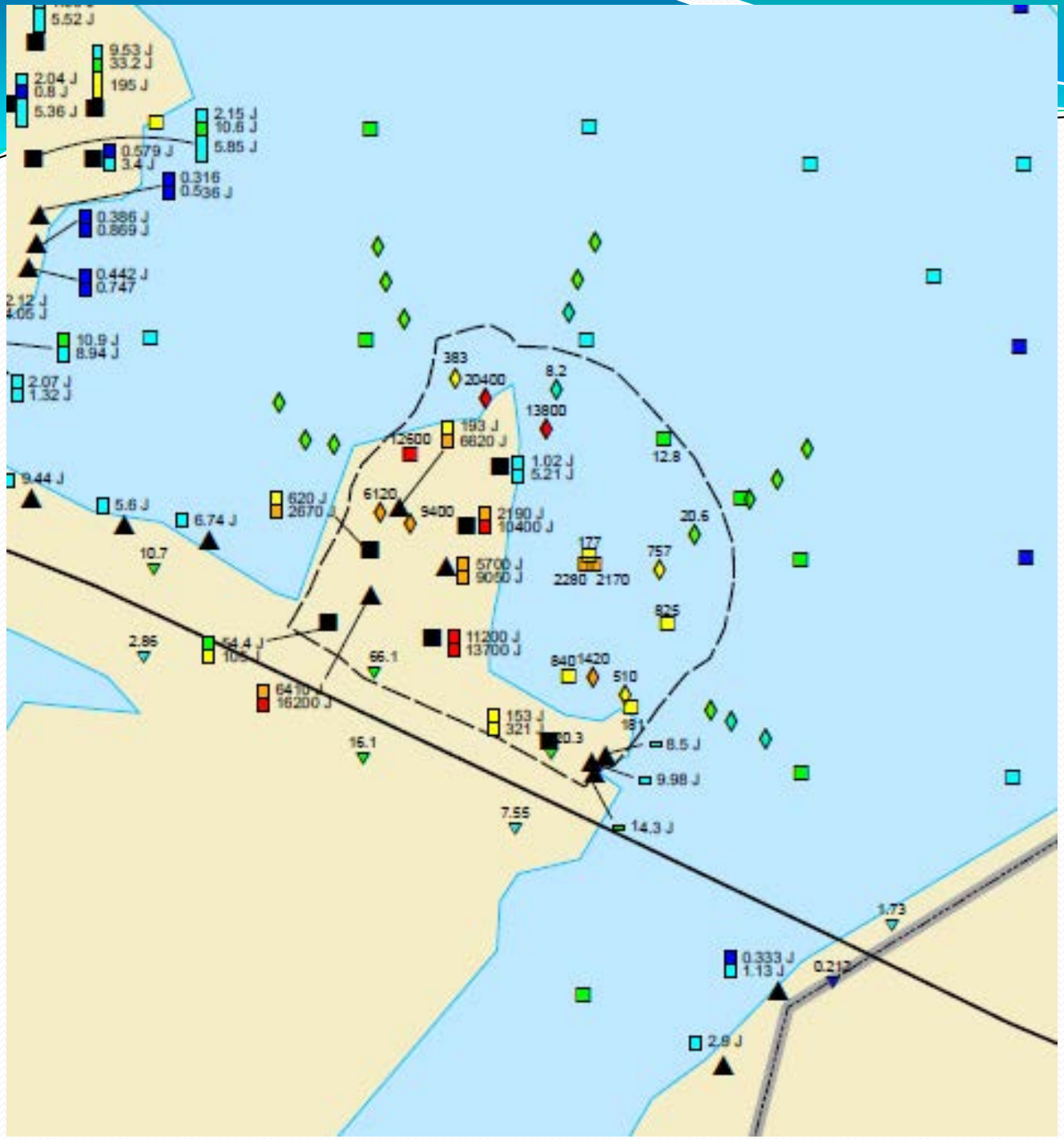
EPA United States Environmental Protection Agency

Preliminary color-coded risk evaluation for surface soils and surface sediments surrounding the site

>5000 ppt TEQ
<5000, >665 ppt TEQ
≤665 ppt TEQ

EPA United States Environmental Protection Agency

United States Environmental Protection Agency



Draft map by Anchor QEA and Integral Consulting Inc.

EPA United States Environmental Protection Agency

	Industrial Surface Soil	
	Contact	Ingestion
>5000 ppt TEQ	Avoid any Contact with soil	Do Not Ingest Soil
<5000, >665 ppt TEQ	Contact with Soil Should Be Minimized	Accidental Ingestion of Soil Should Be Avoided
≤665 ppt TEQ	Risk of Periodic Contact with Soil within Acceptable Limits	Risk of Infrequent Accidental Ingestion of Soil within Acceptable Limits

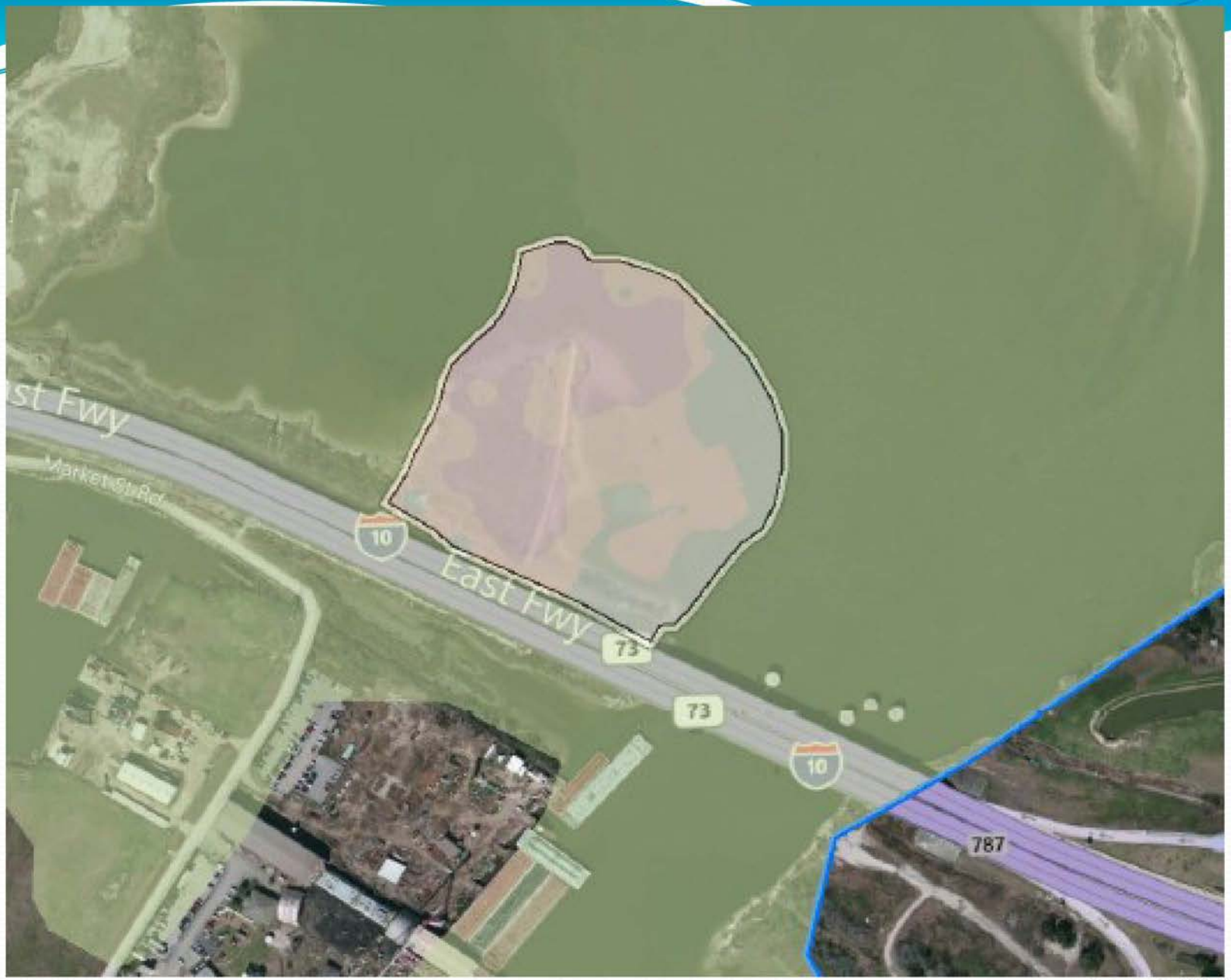
Industrial Surface Sediment

	Contact	Ingestion	Swimming	Wading
>5000 ppt TEQ	Avoid any Contact with Sediment	Avoid any Accidental Ingestion of Sediment	Do Not Swim	Do Not Wade
<5000, >665 ppt TEQ	Contact with Sediment should be as minimized	Accidental Ingestion of Sediment should be avoided	Avoid Swimming	Avoid Wading
≤665 ppt TEQ	Brief Periods of Contact with Sediment (with reasonable hygiene) within Acceptable Limits	Risk of Infrequent Accidental Ingestion of Sediment within Acceptable Limits	Risk of Infrequent Swimming (with reasonable hygiene) within Acceptable Limits	Risk of Infrequent Wading (with reasonable hygiene) within Acceptable Limits

EPA United States Environmental Protection Agency

Adhere to all posted Fish Advisories

EPA United States Environmental Protection Agency

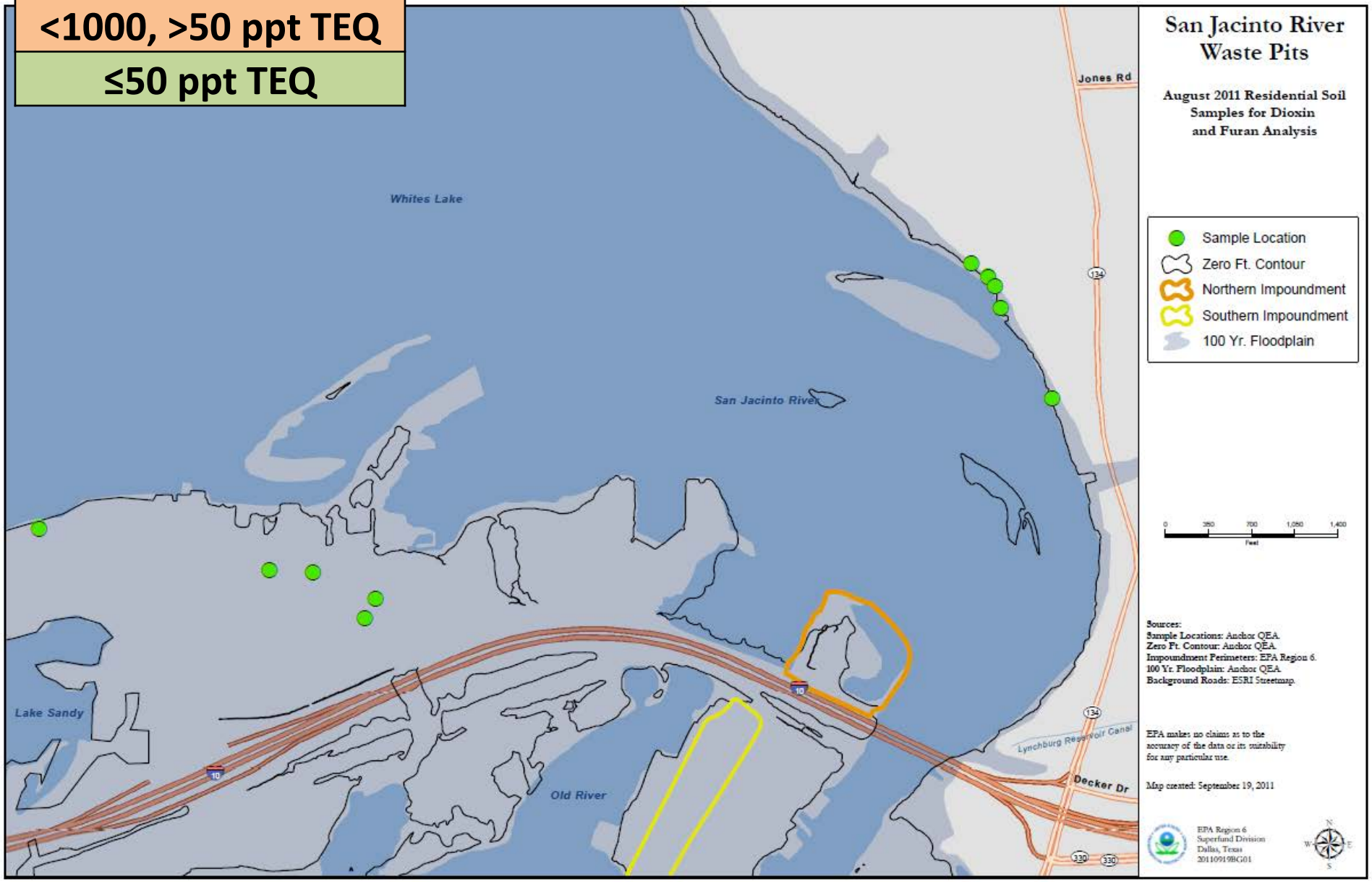


EPA United States Environmental Protection Agency

>1000 ppt TEQ

<1000, >50 ppt TEQ

≤50 ppt TEQ



EPA United States Environmental Protection Agency

	Residential Surface Soil	
	Contact	Ingestion
>1000 ppt	Avoid any Contact with soil	Do Not Ingest Soil
<1000, >50ppt TEQ	Contact with soil should be minimized	Accidental Ingestion of soil should be avoided
<50 ppt TEQ	Risk of Periodic Contact with Soil (with reasonable hygiene) within Acceptable Limits	Risk of Infrequent Accidental Ingestion of Soil within Acceptable Limits

For More Information

U.S. EPA

Gary Miller
Superfund Remedial Project Manager
214.665.8318 or 1.800.533.3508 (toll-free)

Valmichael Leos
Superfund On-Scene Coordinator
214.665.2283 or 1.800.533.3508 (toll-free)

Stephen Tzhone
Superfund Remedial Project Manager
214.665.8409 or 1.800.533.3508 (toll-free)

Donn Walters
Superfund Sr. Community Involvement Coordinator / Public Liaison
214.665.6483 or 1.800.533.3508 (toll-free)

Texas Commission on Environmental Quality

Luda Voskov
Project Manager, Superfund Section
512.239.6368

Crystal Taylor
Community Relations, Superfund Section
512.239.3844

Site Repository
Highlands Public Library, Stratford Branch
509 Stratford Street, Highlands Texas

San Jacinto Waste Pits Superfund Site on the Internet

www.sanjacintowastepits.com or
www.epa.gov/region6/6sf/pdffiles/0606611.pdf

EPA United States Environmental Protection Agency